



## **Preface**

The international conference Workshop on Mathematical Modelling of Environmental and Life Sciences Problems has been initiated in 2002 by the Institute of Mathematical Statistics and Applied Mathematics Gheorghe Mihoc Caius Iacob (ISMMA) of the Romanian Academy of Sciences, Bucharest, Romania, based on a common research project with the Forschungscentrum Juelich, Germany. In this respect, ISMMA organized the first two editions of the Workshop under the name Workshop on Mathematical Modelling of Environmental Problems in June 2002 and 2003 in Bucharest. The topics of these first two editions were directly related to the items of the research project and title of the Workshop, namely: development and application of mathematical models and computer software related to environmental problems. This can be also seen in the papers published in the corresponding proceedings of the Workshop, which concentrate on mathematical modelling and analytical methods in surface and sub-surface hydrology, experimental methods, computational methods and software packages.

Starting with 2004 and based on a Collaboration Agreement between IS-MMA and the Faculty of Mathematics and Informatics (FMI) of Ovidius University of Constanţa, Romania (also involving the Research Center on Applied Mathematics of FMI) the workshop first changes its name to **Workshop on Mathematical Modelling of Environmental and Life Sciences Problems,** and all its other editions (starting with the Third one) have been organized in Constanţa (in 2004, 2005, 2006, 2007, 2008, 2010, 2012, and 2014).

The general topics were kept as: mathematical modeling, experimental methods, computational and software packages, but the research directions covered by the talks were developed, including biology, biomedicine, image reconstruction in computerized tomography, fast numerical algorithms for problems in fluid mechanics, probability and statistics.

The Proceedings of the Workshops 1 to 7 (2002 to 2008) have been published under the auspices of the prestigious Editura Academiei Române,

Bucharest, whereas for the 8th and 9th editions under the auspices of Editura MatrixRom, Bucharest. For the present 10th edition, the Proceedings is been published as a special issue of *Analele Ştiinţifice ale Universităţii Ovidius Constanţa. Seria Matematică*.

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